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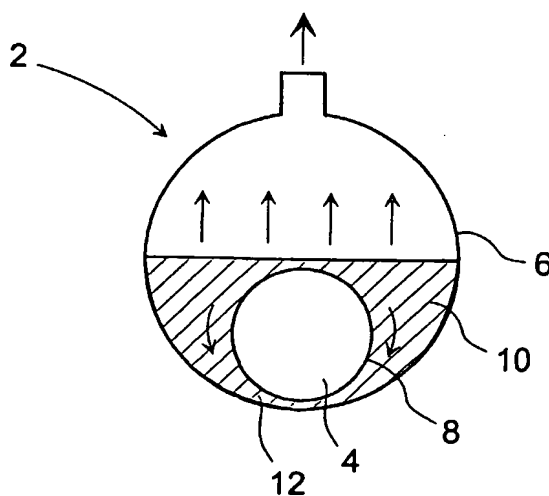
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(54) Title: SUBMERGED EVAPORATOR WITH INTEGRATED HEAT EXCHANGER



**(57) Abstract:** The invention provides a submerged evapo-  
rator (14) with integrated plate heat ex-changer (4) that may  
operate with markedly increased capacity, where the evapora-  
tor (14) does not require more space than other known types  
and have a smaller filling volume of refrigerant (10) than prior  
art units. The integrated plate heat exchanger (4) is built up  
with an outer contour that substantially follow the lower con-  
tour of the casing (6) and the liquid level, where the integrated  
heat exchanger (4) has at least one inlet connection (24.1) and  
at least one outlet connection (24.2) for secondary refrigerant  
(26), and where the upper volume of the casing acts as a liquid  
separator. With such design, much less space is occupied than  
with prior art types of submerged evaporators. The reason is  
that the internal volume is better utilised. Typically, there is  
a cylindric casing (6) with welded or screwed on ends (22),  
where internally there is mounted a plate heat exchanger (4)  
having a part cylindric shape and an external diameter which  
is between 5 and 15 mm less than the internal diameter of the  
casing (6). Hereby is achieved a submerged evaporator (14)  
with reduced filling of refrigerant (10).

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